ARC-14231-2 AFTER FINAL

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Robert Mah

U.S. Serial No: 09/652,302

Group Art Unit: 3736

Filed: 28 August 2000

Examiner: David J. McCrosky

Title: "BODY SENSING SYSTEM"

Assistant Commissioner for Patents

P.O. Box 1450

Arlington, Virginia 22313-1450

AMENDMENT AND RESPONSE AFTER FINAL REJECTION

Dear Sir:

In response to receipt of an Office Action, mailed 12 December 2003, for the above-identified patent application, please enter the following amendments to the application.

Pages 2-9 contain the pending claims, as amended.

Pages 10-14 contain a Reply To Remarks of Examiner.

In the claims

All pending claims (1-20 and 43-48) are set forth here. Amend claim 1 and 9 to read as follows.

Please

NOT

7/15/34

ARC-14231-2

2

PATENT

Please Do Suse Thistory

1 (presently amended). A system for performing one or more relevant measurements at a target site in an animal body, the system comprising:

a probe that can be inserted into a body adjacent to or within a target site and that comprises at least one of a first group of sensors drawn from:

a first sensor that measures one or more elastic parameters associated with the target site drawn from a group consisting of a Young's modulus, a bulk modulus and a Poisson's ratio associated with the target site;

a second sensor that measures one or more thermal parameters, drawn from a group consisting of local temperature, thermal conductivity and specific heat capacity associated with the target site;

a third sensor that measures optical reflectance $OR(\lambda; meas)$ of a selected region of the target site for one or more selected wavelength ranges;

a fourth sensor that measures amount of blood flow adjacent to or within the target site;

a fifth sensor that measures interstitial fluid pressure adjacent to or within the target site;

a sixth sensor that measures at least one of pO2 and pCO2 associated with the target site;

a seventh sensor that measures local pH associated with a selected portion of the target site; and

an eighth sensor that measures at least one of an electrical parameter and a bioimpedance parameter associated with a selected portion of the target site;

where the probe further comprises at least one of a second group of sensors drawn from:

a ninth sensor that measures a selected characteristic of at least one of margin size, interstitial fluid pressure and blood flow velocity, associated with a margin of the target site; and

a tenth sensor that measures at least one of vascular size [and/or] and vascular density associated with the target site.